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ABSTRACT

Noting that the well-being of children and that of mothers cannot be separated, this report provides information on the well-being of mothers worldwide. The report compares the status of mothers in 20 industrialized nations and in 86 developing countries, and creates a Mothers' Index measuring the overall status of mothers. The Mothers' Index is a composite of elements contributing to a woman's well-being, including health status, modern contraceptive use, literacy, and participation as national government officeholders; and elements contributing to a child's well-being, including infant mortality rate, access to safe water, primary school enrollment, and nutritional status. Data were based on published statistics from governments, international agencies, and research institutions. The report affirms the strong link between the well-being of mothers and children and identifies two factors that make a vital difference in their well-being: female education and access to--and use of--family planning services. The report also finds that national wealth alone does not guarantee the welfare of mothers and children. Recommendations from the analysis include the following: (1) ensure access to quality education for both women and girls; (2) ensure that all women have access to high quality, voluntary family planning services, in the context of broader maternal and child health services; (3) improve current research and conduct new studies that focus specifically on mothers; and (4) close the gap in mothers' and children's well-being among marginalized populations in industrialized countries. Appended is each country's score for each component of the Mother's Index, a description of the methodology, and research notes. (KB)

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ED 442 560

State of the World's Mothers 2000

a report by Save the Children

First-ever **Mothers' Index** 106 Countries Ranked

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Save the Children.

Save the Children is an international nonprofit child-assistance organization working in more than 40 countries worldwide, including the United States, and serving nearly 9 million children and adults. Our mission is to make lasting, positive change in the lives of children in need. Save the Children also is a member of the International Save the Children Alliance, which is a worldwide network of 26 independent Save the Children organizations working in more than 100 countries to ensure the well-being and protect the rights of children everywhere.

State of the World's Mothers 2000 **was published with support from the Bill and Melinda Gates Foundation.**

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Front Cover:
A mother and child in Burkina Faso watch the digging of a well that signals the start of a communal garden.

Left:
A mother brings her child to a microcredit meeting in Amman, Jordan.

Foreword

I can think of no better opportunity than Mother's Day for Save the Children to present this report on the state of the world's mothers. In doing so, it helps to focus public attention on the very real needs of mothers – and their children – and to galvanize action to do better for the women who are raising the world's future generations.

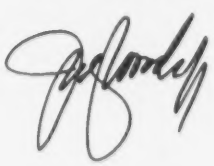
Judy Woodruff is Principal Anchor for CNN and a member of Save the Children's Advisory Board.

State of the World's Mothers 2000 is a groundbreaking report. In creating the first-ever Mothers' Index, it enables us to see at a glance how individual countries compare in meeting the needs of mothers.

The report confirms with facts what we already know in our hearts: that the well-being of children and the well-being of mothers cannot be separated. Children cannot thrive if their mothers do not. And no mother can count herself lucky when her children are malnourished, deprived of schooling, or forced by poverty to work at too young an age in dangerous and degrading situations.

As one of the nearly two billion mothers in the world today, I know the incredible joys and responsibilities of having children and helping them grow and learn. But I'm also a journalist who is aware that in too many places mothers struggle far harder than they should. Too many mothers die or watch their children die, all from preventable causes. Too many mothers are forced to choose between feeding themselves and feeding their children. And untold numbers of mothers carry the weight of their families and societies without support or recognition of their enormous value or many needs.

My long association with Save the Children has shown me that to improve the lives of children, we must help mothers improve their own lives. Releasing this badly needed report, especially on Mother's Day, is an important step in reaching that goal.



Judy Woodruff

Introduction

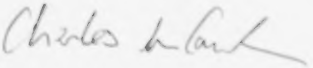
Charles MacCormack, President of Save the Children

In *State of the World's Mothers 2000*, Save the Children examines how the world's mothers are faring at the beginning of the new millennium. It helps document conditions for mothers in 106 countries and creates a first-ever Mothers' Index that shows where mothers do best and where they face the greatest hardships.

Why should Save the Children be so concerned with mothers? Because 70 years of field experience has taught us that the quality of children's lives depends on the health, security, and well-being of their mothers. As primary caretakers in virtually every society, a mother's ability to make informed decisions about her children – their health, their education, and their values – will affect them for life. **To save children, we must save their mothers.**

What are the factors that make up a mother's well-being? Where do mothers fare best and worst? What are the reasons for these differences and what can we do to narrow the gap? These are some of the questions that *State of the World's Mothers 2000* asks and answers.

The analysis behind *State of the World's Mothers 2000* affirms that we are on the right path, and that our investments and efforts are worthwhile. It also recognizes that data alone do not tell the whole story and underscores those areas where further research is needed. Most important, this report is a call to action. It sets an agenda for the coming decade to guide our own efforts and those of others – policy makers, donors, a concerned public, and all those who care about children and their mothers.



Charles MacCormack, President
Save the Children

executive summary

A mother takes time to relax with her three-year-old son in the doorway of their home in Mali.

State of the World's Mothers 2000 compares the status of mothers in 106 countries – 20 industrialized nations and 86 in the developing world.[1] While many important publications have examined diverse aspects of women's lives and roles, this report is the first to capture a global overview of motherhood – a critical role played by nearly two billion women who have a major impact on the world's future.

The Mothers' Index

State of the World's Mothers 2000 has constructed a Mothers' Index that measures the overall status of mothers. Because there are limited data specifically on mothers, the Index is a composite of elements that make up a woman's well-being and those that comprise a child's well-being. For women, indicators of well-being include health status, modern contraceptive use, literacy, and participation as national government officeholders. For children, they include infant mortality rates (IMR), access to safe water, primary school enrollment, and

A member of the Zemtaba (Understanding) Women's Association in Burkina Faso works in her communal garden where women are learning how to garden and how to dry fruits and vegetables.

nutritional status. Together, these add up to the well-being of women who are mothers – the Mothers' Index.

Research for *State of the World's Mothers 2000* is based on published statistics from governments, international agencies, and research institutions. The findings are provocative – but the available data don't tell the whole story. One must look beyond the statistics, both to understand the reasons for "success" in some countries and also to appreciate the complex environment in which mothers live.

Key Findings

State of the World's Mothers 2000 affirms the strong link between the well-being of women and of children. It reveals two factors that make a vital difference in their well-being: female education and access to, and use of, family planning services. The report also finds that national wealth alone does not guarantee the welfare of mothers and children.

Recommendations

The purpose of this report is not simply to provide a ranking or presentation of findings. Its contents call urgent attention to those efforts that can make a profound difference for mothers and their children. Recommendations from this analysis include the following:

- Ensure access to quality education for *both* women and girls.
- Ensure that *all* women have access to high quality, voluntary family planning services, in the context of broader maternal and child health services.
- Improve current research and conduct new studies that focus specifically on mothers.
- Close the gap in mothers' and children's well-being among marginalized populations in industrialized countries.

the research behind the numbers

A mother and her son in the Philippines.

State of the World's Mothers 2000 sought data for as many countries as possible. It relies on information published by governments, research institutions, and international agencies.

State of the World's Mothers 2000 complements other important reports such as UNICEF's *State of the World's Children* and the United Nations Development Programme's *Human Development Report* and *Gender Development Index*. While those documents illustrate global differences in the status of males and females, this report has collected and analyzed information that is specific to mothers' well-being.

But statistics are far more than numbers. They provide strong clues about mothers' overall quality of life, their access to resources, their opportunities for a viable livelihood, and their ability to make informed decisions about their own lives and the lives of their families.

The complete Mothers' Index, based on a composite of separate indices for women's well-being and children's well-being, appears in Appendix 1. A description of the research methodology appears in Appendix 2. Notes and references appear in Appendix 3. The indicators and their significance are described briefly below.

Indicators for Women's Well-Being

Lifetime risk of maternal mortality. This indicator calculates the risk of death a woman faces from pregnancy or childbirth during her lifetime.

Percent of women using modern contraception. This indicator reflects the percent of women aged 15 to 49, married or in union, who use modern contraception to plan the spacing or number of their children.[2]

Percent of births attended by trained personnel. Skilled birth attendants can reduce maternal and newborn mortality by ensuring that hygienic practices are followed in a normal delivery and that emergency obstetric care is sought when necessary.

A Bolivian mother harvests turnips as she watches her children.

Percent of pregnant women with anemia. This indicator reflects nutritional status, dietary practices, the prevalence of certain worm infestations and malaria, and access to prenatal care.

Adult female literacy rate. This measure reflects the percent of women (over 15) who can read and write. It is estimated that two-thirds of the world's 960 million illiterate adults are women.[3]

Percent of national government positions held by women. This indicator represents the proportion of women officials in national government. It reflects women's ability to participate in and influence government policies and programs that benefit mothers and children.

Indicators for Children's Well-Being

Infant mortality rate (IMR). This indicator is the number of infants out of 1,000 live births who die in their first year. The IMR provides telling information about infant feeding and early childcare practices in the home, accessibility of food, preventive health services, and medical care.

Gross primary enrollment ratio. This is the total number of children enrolled in primary school – regardless of age – expressed as a percent of the total number of children of primary school age.

Percent of under-fives suffering from moderate or severe nutritional wasting. This indicator measures acute malnutrition. "Wasting" is the term used when a child falls significantly below internationally recognized weight for height standards.

Percent of population with access to safe water. Access to safe water contributes to sanitary conditions and adequate cultivation and consumption of food.

The Data Void: What We Don't Know About Mothers

This report sought data on access to childcare and economic resources, violence against women, prevalence of HIV/AIDS, and representation of women in local government. But this information was unavailable, incomplete, or inaccurate.

In particular, there is a striking lack of information about women's economic status, including their share and control of household income. Local data in many developing countries show that when women control a greater share of household income, they tend to spend more than men on the well-being of their children. Studies from countries as diverse as India, Peru, and Uganda help confirm a close positive link between the increased earnings of women microentrepreneurs and their children's school enrollment.[4]

However, there are no reliable international statistics on the proportion of household income controlled by mothers. Published data only reflect their earnings in the formal labor force, not their total earnings. International Labour Organization studies have established that over 90 percent of women's income in most developing countries is earned in the "invisible" economy, where it is unreported to the government.

Without more specific and complete data on women and their experiences, there is no way to accurately measure the improvements we seek in the lives of the world's mothers.

the mothers' index and country rankings

A Bhutanese mother carries her sleeping baby.

The Mothers' Index measures and ranks the status of mothers in 106 countries – 20 industrialized nations and 86 in the developing world.[4] The rankings reveal an enormous gap between the highest and lowest scoring countries and communicate an urgent need to take action to narrow that gap. While many of the top-ranked countries are also the richest, the data demonstrate that a country's wealth is no guarantee of well-being. (See Appendix 1 for the complete Mothers' Index.)

The Top 10

The World's Top 10: Still Could Do Better

Mothers' Index Rank Top 10 Countries **Overall**		Mothers' Index Rank Top 10 **Industrialized** Countries		Mothers' Index Rank Top 10 **Developing** Countries	
1	Norway	1	Norway	10	Cyprus
2	Canada	2	Canada	12	Costa Rica
3	Australia	3	Australia	13	Singapore
4	Switzerland	4	Switzerland	14	Colombia
4	USA	4	USA	16	Chile
6	Netherlands	6	Netherlands	19	Cuba
7	United Kingdom	7	United Kingdom	20	Uruguay
8	Finland	8	Finland	21	Republic of Korea
9	France	9	France	21	Jamaica
10	Cyprus	11	New Zealand	21	Panama

Countries ranking in the top 10 (overall) on the Mothers' Index all displayed high scores for women's health and education status. Every country has a female literacy rate over 90 percent and the lifetime risk of a woman dying in childbirth is less than one in 3,000. Infant mortality ranges from four to eight per 1,000 live births, and access to safe drinking water is virtually universal. Women's political status among the top 10 (overall) countries showed more variation, from Norway where women hold 44 percent of national government positions, to the United Kingdom where they hold less than 10 percent.

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Mothers' Index Ranking

The Mothers' Index reflects how individual countries compare in meeting the needs of mothers. Listed here are the Mothers' Index rankings for all 106 countries included in the survey, along with corresponding rankings for each country's women's and children's indices. See Appendix 1 for complete Mothers' Index.

Mothers' Index Rank		Women's Index Rank	Children's Index Rank
1	Norway	1	10
2	Canada	2	9
3	Australia	3	3
4	Switzerland	5	3
4	USA	4	15
6	Netherlands	6	5
7	United Kingdom	8	1
8	Finland	7	12
9	France	11	5
10	Cyprus	10	12
11	New Zealand	9	22
12	Costa Rica	12	8
13	Singapore	13	7
14	Colombia	14	18
15	Japan	14	18
16	Chile	16	12
16	Portugal	18	2
18	Hungary	17	29
19	Cuba	19	18
20	Uruguay	21	10
21	Jamaica	24	26
21	Korea, Republic of	21	33
21	Panama	29	24
24	Kazakhstan	20	37
24	Trinidad and Tobago	23	31
26	Mexico	26	30
27	Russia	26	32
28	Brazil	26	35
29	Philippines	30	37
30	Argentina	30	42
31	Ecuador	33	40
32	Dominican Republic	32	35
33	Honduras	38	28
34	Romania	35	35
35	Czech Republic	43	21
36	South Africa	44	32
37	El Salvador	34	40
38	Venezuela	40	41
39	Paraguay	44	39
40	Lebanon	49	25
41	Mauritius	38	55
42	Thailand	41	51
43	Jordan	54	26
44	China	48	42
44	Peru	51	34
44	Zimbabwe	47	46
47	Moldova	37	63
47	Sri Lanka	35	66
47	Uzbekistan	24	81
50	Kuwait	49	54
51	Malaysia	54	44
52	Tajikistan	42	72
52	Tunisia	64	16
54	Namibia	51	59
54	Nicaragua	58	47
56	United Arab Emirates	56	58
56	Vietnam	46	74
58	Mongolia	53	61
59	Botswana	60	49
60	Libya	70	16
61	Iran	67	44
62	Turkey	59	65
63	Lesotho	57	70
64	Guatemala	65	57
65	Bolivia	61	63
66	Indonesia	63	68
67	Syria	72	51
68	Algeria	71	56
69	Kenya	65	76
70	Egypt	74	53
71	Myanmar	69	73
72	Zambia	61	90
73	Papua New Guinea	68	89
74	Oman	77	67
75	Cameroon	76	69
76	Uganda	73	86
77	Iraq	79	75
78	Ghana	77	83
79	Togo	88	59
80	Morocco	86	61
81	Tanzania	75	93
82	Malawi	81	77
83	Haiti	80	96
84	Nigeria	84	88
85	India	92	79
86	Senegal	94	80
86	Yemen	91	83
88	Central African Republic	82	99
89	Cote d'Ivoire	96	78
90	Madagascar	87	95
91	Sudan	83	97
92	Benin	85	98
93	Mozambique	93	92
94	Bangladesh	97	87
94	Mauritania	100	82
96	Pakistan	99	85
97	Angola	89	100
98	Gambia	102	90
99	Nepal	106	71
100	Burkina Faso	97	101
101	Chad	90	104
102	Burundi	104	94
102	Ethiopia	95	103
104	Guinea	103	102
105	Mali	101	105
106	Niger	104	106

What commands attention here are the large and unacceptable gaps between rich and poor people, even in the highest-scoring countries (see box on page 19). In Canada, for example, the infant mortality rate is nearly twice as high in the rural territories of the Yukon and Northwest as in the more populated and wealthier provinces of Ontario and Quebec.[3] In many countries, well-being also varies greatly among ethnic groups. In Australia, for instance, the life expectancy of indigenous women is 20 years less than the national average, and their babies are about twice as likely to be of low birth weight and more than twice as likely to die at birth than babies born to non-indigenous mothers.[4]

The Bottom 10

The Bottom 10: The Longest Road Ahead

Mothers' Index Rank Bottom 10 Countries **Overall**		Mothers' Index Rank Bottom 10 **Industrialized** Countries		Mothers' Index Rank Bottom 10 **Developing** Countries	
97	Angola	15	Japan	97	Angola
98	Gambia	16	Portugal	98	Gambia
99	Nepal	18	Hungary	99	Nepal
100	Burkina Faso	24	Kazakhstan	100	Burkina Faso
101	Chad	27	Russian Federation	101	Chad
102	Burundi	34	Romania	102	Burundi
102	Ethiopia	35	Czech Republic	102	Ethiopia
104	Guinea	47	Moldova	104	Guinea
105	Mali	47	Uzbekistan	105	Mali
106	Niger	52	Tajikistan	106	Niger

A mother and her two-year-old daughter enrolled in the Nutrition Education Rehabilitation Program in the village of Khanya, Nepal, where mothers learn and use good nutrition to benefit themselves and their families.

Too many of the 106 countries are places where motherhood is still fraught with risk and hardship. The bottom 10 (overall) countries scored low on all aspects of the Mothers' Index. Just six percent of women use modern methods of contraception, and roughly 26 percent of births are attended by trained personnel.

The data also highlight the regional dimension of this tragedy. Nine of the bottom 10 countries listed are in sub-Saharan Africa. That region also accounts for 18 of the bottom 25 (overall) countries.

Data on education illuminate these regional discrepancies. At 80 percent, Latin America has the highest female literacy rate among developing regions studied, while Africa has the lowest, at 45 percent. Within Africa, South Africa, Zimbabwe, and Mauritius have literacy rates that are close to 80 percent. But in Burkina Faso and Niger, fewer than 10 percent of women can read and write.

Comparisons between sub-Saharan Africa and the industrialized world are even starker. On average, only half of all females in sub-Saharan Africa receive primary education at the appropriate age, compared with 97 percent in industrialized countries.

These findings reinforce the need for greater global attention to sub-Saharan Africa and increased support for education and other services targeted at women and children by governments in the region and by the international community.

At a Glance: Real-Life Differences for Women and Children in the World Today

The following chart summarizes how developing and industrialized countries perform with regard to the indicators studied, and reveals some shocking disparities. See pages 5-6 for descriptions of individual indicators.

Indicator	Developing Country Average	Industrialized Country Average	United States
Women's Well-being			
Lifetime risk of maternal mortality	1 in 263	1 in 3,180	1 in 3,500
Percent of women using modern contraception	30	60	67
Percent of births attended by trained personnel	63	98	99
Percent of pregnant women with anemia	41	(NA due to small number of countries reporting data)	NA
Adult female literacy rate (in percent)	61	98	99
Percent of national government positions held by women	7	12	30

Indicator	Developing Country Average	Industrialized Country Average	United States
Children's Well-being			
Infant mortality rate (deaths per 1,000 live births)	59	14	7
Gross primary enrollment ratio*	92	102	102
Percent of population with access to safe water	69	89	NA
Percent of under-fives suffering from moderate or severe nutritional wasting	7	(NA due to small number of countries reporting data)	1
GDP per capita	$4,539	$14,813	$29,010

* Expressed as a percent of the total number of children of primary school age.

what do the numbers mean?

A mother and her baby at a women's group meeting in Bolivia.

One hundred and four countries in the Mothers' Index fall between Norway, which ranked first, and Niger, which ranked last. But what does this gap mean in human terms? What is the difference between being a mother in a top 10 country and in a country that ranks in the bottom 10? The risk, pain, and tragedy that this gap represents are staggering:

- **In Niger, one woman in nine will die in pregnancy or childbirth. In Norway the risk is only one in 7,300.** Even in countries such as Tajikistan and Tunisia, which represent the median point on the Mothers' Index, the lifetime risk of maternal mortality is as high as one in 120 and one in 140, respectively. In the United States, the lifetime risk of maternal mortality is one in 3,500.
- **One of every eight children born in the bottom 10 countries (overall) does not live to see his or her first birthday.** In the top 10 countries in this study, only one in 182 children dies before

A Bosnian grandmother accompanies her children to school.

reaching age one. For all European countries in the sample, fewer than one in 125 die in infancy.

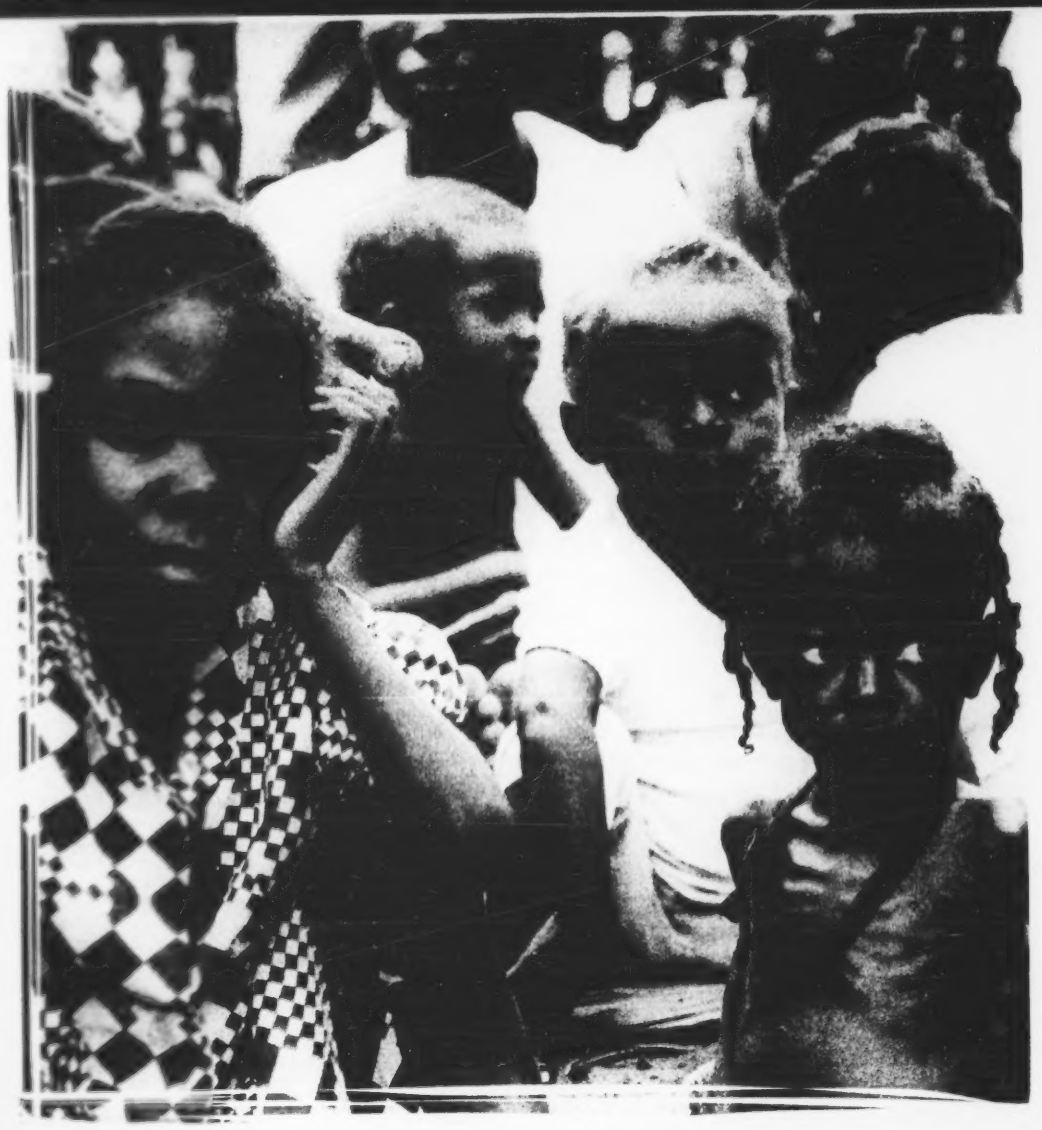
- In Asia, one mother in 19 sees her child die in the first year of life. In Bangladesh and Mongolia, where the infant mortality rate is 81 deaths per 1,000 live births, a mother is 16 times more likely to see her child die in the first year of life than a mother in France or Switzerland. In Bangladesh and Mongolia, a mother is 12 times more likely to suffer this loss than a mother in the United States.
- In the bottom 10 countries, only 48 percent of children have access to safe water. The rates in these countries range widely, from 78 percent in Burkina Faso to 25 percent in Chad. Yet, in the top 20 countries, virtually all children have access to this fundamental prerequisite for good health.
- In the bottom 10 countries, only 58 percent of children are enrolled in primary school and only two-thirds of those reach grade 5. In the top 10 countries, virtually all children will enroll in primary school and reach grade 5.

Data Tell Only Part of the Story

At best, national statistics can only tell part of the story. They cannot explain without further research and analysis why some countries do better than others, despite less national wealth. Nor can they explain the combination of factors needed to bring maternal and child well-being to an acceptable level. *State of the World's Mothers 2000* considered information that was available for the largest number of countries possible – but there is insufficient data to fully understand the reasons for the relationships and trends observed.

For example, in the countries that are doing better than expected, there appears to be no common denominator. No single political system or regional/cultural pattern guarantees that a country will harness its resources to respond successfully to the needs of women and children. Government structure, policies, socioeconomic and even cultural factors must be investigated to explain why mothers do better where this is the case.

Similarly, while the findings highlight important correlations among indicators in this study, it does not establish causality. What the findings do provide, however is confirmation of what experience has shown and direction for further investigation.



Haitian mothers and children.

1. The Well-being of Women and Children is Inseparable.

This report affirms what research and experience show: When mothers do well, it is far more likely that their children will do well. Similarly, when one group fares poorly, so does the other. The correlation between the well-being of mothers and the well-being of children is clear and absolute.

In *State of the World's Mothers 2000*, the analysis shows that 17 of the top 20 countries do well in both the Women's Index and the Children's Index. Similarly, 13 of the bottom 20 countries fare poorly on both indices.[1]

This link is dramatic when comparing indicators for individual countries:

- In Yemen, where less than half of births are attended by trained health professionals, 76 infants out of every 1,000 die in their

International Standards on Human Rights of Women and Children

Two critical, legally binding, and widely ratified treaties – the UN Convention on the Rights of the Child (CRC) and the UN Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) – promote the human rights of children and of women, respectively.

The CRC was adopted in 1989 and subsequently ratified by all but two countries, the United States and Somalia. It stipulates that all children are entitled to universal political, economic, social, and cultural rights; they are also entitled to special rights as children. The CEDAW, adopted in 1979 and ratified by 165 countries, calls for the enjoyment of all fundamental human rights and freedoms by women and girls.

While there are differences in emphasis, the treaties share significant goals, principles, and strategies. The rights and well-being of children and of women are closely linked. Together, they are frequently the poorest, most vulnerable, and most powerless populations, and their rights are often the first to be ignored or violated. They share the need for increased policies, programs, and resource allocations that support health, education, and other social service sectors.

first year. In Australia, where virtually all births are attended by trained personnel, the infant mortality rate drops to five.

- In Ethiopia, where only 25 percent of women are literate, one child in 10 dies in infancy, and only one child out of three is enrolled in primary school. In Singapore, where 86 percent of women are literate, only four of every 1,000 infants die, and virtually all children are enrolled in primary school.

The findings are consistent with current research that shows a mother's well-being has a direct impact on her children's well-being. For newborns, survival is dramatically linked to a mother's health during pregnancy. If a mother suffers from malaria, anemia, or HIV/AIDS, her newborn is likely to have a far more difficult start. Newborn infections and low birth weight are both linked to a mother's health and nutritional status during pregnancy, and are among the leading causes of death in a baby's first month of life.

Mother and her child at a daycare center program in Kentucky, United States

A mother's well-being continues to influence her children's development through childhood and adolescence. In South Asia, for instance, where nearly 60 percent of women are underweight, so too are 50 percent of children. In sub-Saharan Africa, 20 percent of women and nearly one-third of children are malnourished.[8]

A woman's education also has a dramatic impact on the quality of life she is able to provide for her children. Knowledge and opportunities that derive from full literacy enable a mother to better feed, nurture, and ensure the health care of her children. And a literate mother is more likely to send her children to school – including her daughters.

Children's well-being is also closely linked to women's legal, political, and economic status. Women and children are among the poorest and most marginalized populations, the most frequent victims of domestic violence and civil strife, and the first to be called on to

endure heavy unremunerated work burdens – such as household chores and walking miles each day to gather water and fuelwood. And with only about 10 percent of national government bodies comprised of women, it's not surprising that the needs of women and children are often overlooked.

Vietnamese mothers and children participate in a child nutrition program where they learn to prepare healthy food

2. Two Critical Factors: Female Education and Family Planning

This report identifies female education and high quality, voluntary family planning as two factors that make a vital difference in the well-being of mothers and children.

Female Education

This study helps demonstrate the close link between female literacy and infant survival.

- All countries that scored among the top 10 in the Mothers' Index have a female literacy rate of over 90 percent, and their infant mortality rate is consistently below eight deaths per 1,000 births.
- Among the 86 developing countries in this study, 44 have achieved an infant mortality rate of 50 or lower. In these same countries, the female literacy rate ranges from 70 percent to 83 percent. Among the remaining 42 developing countries with an infant mortality rate of over 50, the female literacy rate varies much more widely, with a midpoint rate of 38 percent.[9]

Creative Approaches to Girls' Education: Malawi

Over the past decade, few development issues have received greater attention than eliminating the gender gap in education. The good news is that the enrollment numbers for girls are up. The bad news is that girls are dropping out of school in even larger numbers than they are entering. Reasons include marriage and pregnancy, loss of family income, poor quality schools, and discrimination against girls.

Malawi, with a female literacy rate of 42 percent, is taking important steps to ensure that more girls attend and remain in school. With support from the U.S. Agency for International Development, the government has provided and encouraged gender-sensitivity in teacher training, classroom practices, and textbooks. With pregnancy accounting for 76 percent of female dropouts, the government now allows pregnant girls to remain in school.

In rural areas of Malawi that are underserved by the public school system, community-based village schools are taking creative steps to ensure access for girls. The communities manage the schools, and hire and train the teachers. Female teachers provide positive role models. Student committees promote leadership by girls and hands-on life skills experiences, including child-care training for both boys and girls.

Mothers and children in Haiti

The importance of female literacy goes beyond knowing how to read and write

Education provides a woman the opportunity to develop life skills that are critical to her own well-being. Literacy has a major influence on her access to information, on her self-esteem, and on her capacity to identify and seize opportunities to improve her life and the lives of her children. All of these behaviors, in turn, help to break the cycle of poverty for mothers and their children.

Female education also directly affects a woman's economic and health status. Studies that examined the impact of primary education on women's wages found that income rose by 10 to 20 percent for each additional year of schooling.[10] Educated women also are more likely to postpone marriage and childbirth. In Togo, for example, one in six girls who has not been to school gives birth each year, while only one in 100 with some secondary education does so.[11] How a child grows and develops depend substantially on a mother's education. An educated mother is likely to provide her children with nutritious foods, to improve sanitary conditions in her home, and to seek appropriate health care for herself and for her children.

An educated mother is much more likely to send all her children to school, including her daughters. And when a girl attends school, she not only increases her economic opportunities, but she is much more likely to postpone marriage and childbearing, increasing the likelihood that her children will be born when she is ready and able to support and care for them.

Family Planning

The data in the Mothers' Index is consistent with other research findings which indicate that increased access to and use of modern contraception can lead to dramatic improvements in infant and maternal survival rates. In developing countries with low GDPs, access to voluntary, quality family planning and related health services is a critical factor in mothers' and children's well-being.

For example:

- In those countries where maternal mortality is highest, women are least likely to have access to or use modern contraception. For example, in Burkina Faso, where only four percent of women use modern contraception, the lifetime risk of maternal death is one in 14. In contrast, in Brazil, where nearly three-fourths of women use birth control, maternal mortality rates are only one in 130.
- Of the 86 developing countries in the study, 44 have achieved an infant mortality rate of 50 or fewer deaths. In half of these countries, 45 percent or more of the women use modern contraceptives. The other 42 developing countries have an infant mortality rate of more than 50. In half of these, less than 10 percent of women use modern contraception.

Family planning saves mothers' and children's lives

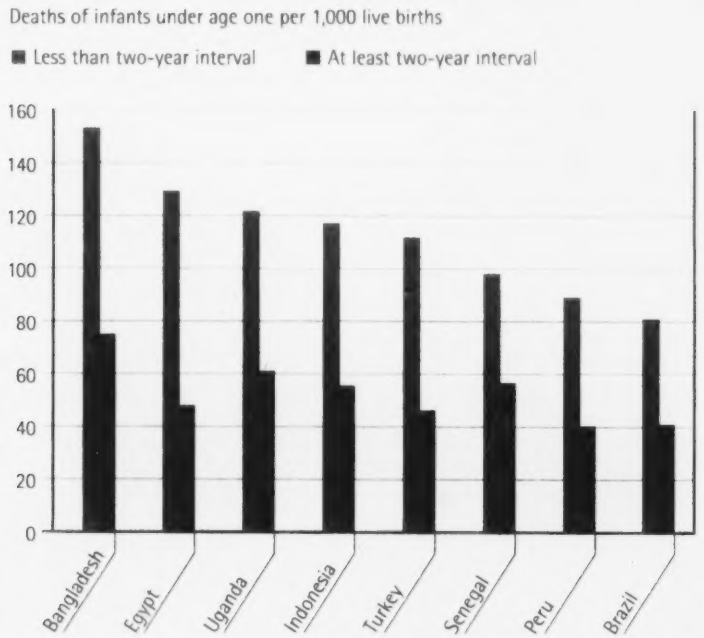
Lack of access to family planning and reproductive health care exacts a staggering human toll. Every year, millions of women and children in the developing world die as a result of births that are too close together, too early, or too late in a woman's life.

In developing countries, maternal mortality is the leading cause of death for women of reproductive age, killing almost 600,000 women a year. Every minute of every day, at least one woman dies from complications of pregnancy and childbirth.

One in four maternal deaths could be prevented by family planning, which postpones early, high-risk pregnancies; gives women's bodies a chance to recover from a previous pregnancy; avoids unintended pregnancies and unsafe abortions; can offer protection from sexually transmitted diseases (STDs), including HIV/AIDS; and enables women to stop childbearing when they have reached their reproductive goals.[16]

Family planning also makes important contributions to child survival (see chart below). More than 11 million children under age five die every year in the developing world. Family planning could prevent 25 percent of these deaths by spacing births at least two years apart, by helping women to bear children during their healthiest reproductive

Infant Mortality by Birth Interval



On average, infants born after short birth intervals are twice as likely to die as those born after intervals of two or more years.

Source: Unpublished analysis of USAID-funded Demographic and Health Surveys, 1993-1997, Macro International, Calverton, MD

years, and by enabling parents to have their desired number of children.[12]

By increasing access to contraception information and services, family planning programs also play an essential role in reducing the incidence of abortion. In the developing world, an estimated 60 percent of all pregnancies (75 million a year) are unintended, and nearly 46 million end in abortion.[13]

The relationship among increased contraceptive use and reductions in abortions has been documented in many countries. In a recent study of three countries of the former Soviet Union, contraceptive use increased by one-third to one-half since the early 1990s. During the same period, abortion rates have declined by as much as one-half.[14]

3. National Wealth Alone Does Not Guarantee a Mother's Well-being.

Clearly, the well-being of mothers and children is greater in wealthier countries. To better understand this link, rankings on the Mothers' Index were compared with GDP per capita.[15] Not surprisingly, nine of the top 10 nations on the Mothers' Index have a GDP per capita of over $20,000; the GDP per capita of Cyprus, which ranks 10th, is $14,000, still far ahead of most developing countries. There are, however, some noteworthy exceptions.

High GDP, Low Performance

Some of the highest GDP countries score much lower on the Mothers' Index than would be expected, indicating that national income alone does not guarantee high levels of well-being for mothers or their

Mothers and children participate in a nutrition education program in Nepal.

children. For example, the Near East/Northern Africa region significantly "under performs" in meeting the needs of its mothers and children. Three of the five countries with the largest discrepancies between wealth and mothers' well-being are in this region. Kuwait ranks third overall in GDP per capita, but 50th out of 106 on the Mothers' Index.

A mother and son work together in a summer enrichment program in Oregon, United States.

Low GDP, High Performance

Other countries scored much higher on the Mothers' Index than their GDP might indicate. This strongly suggests that political will and commitment can help ensure that limited resources focus on investments in women, and on low-cost programs that will significantly improve their lives. For example, Australia, Finland, New Zealand, and Cyprus were among the top 10 in the Mother's Index, but not among the top 10 in GDP per capita. In the developing world, Honduras, El Salvador, Tanzania, Moldova, and Tajikistan are among those performing better than might be expected based solely on GDP. Costa Rica is an excellent example of what commitment and action can achieve for mothers and children (see box on next page).

The United States Can Do Much Better for Children

Although the United States has the highest GDP per capita on the Mothers' Index, it falls to 15th position in children's well-being.

At present, one child in five in the United States lives in poverty.[16] Furthermore, children are twice as likely as adults to be poor, and black and Hispanic children are twice as likely as white children to be poor.

Discrepancies among ethnic groups are also visible in other indicators of child well-being. For example, a Centers for Disease Control (CDC) study of Northwest American Indians and Alaskan Natives in Idaho, Oregon, and Washington, reports that the infant mortality rate among these groups still exceeds the infant mortality rate of other ethnic groups – despite its dramatic two-thirds decline between 1985 and 1996.[17]

Children's well-being in some U.S. areas is also alarmingly low. In Washington, D.C., for example, the infant mortality rate is comparable with developing countries such as Panama and Uruguay.

These pockets of unacceptable disadvantage are not limited to children. Indicators of maternal well-being also demand improvement, especially among minority women. The CDC reports that the overall ratio of maternal mortality has remained at seven to eight per 100,000 live births, falling short of its year 2000 goal of 3.3. For black women, however, the rate is 18 to 22, more than three times higher than the rate for white women.

The high rate of teen pregnancy is a major contributing factor to low children's and mother's well-being in some U.S. cities and regions. According to the CDC, close to one million U.S. teenagers become pregnant each year. American teenagers are 45 percent more likely to get pregnant than their peers in Great Britain, and an astounding 14 times more likely than their Japanese counterparts.

Costa Rica: An Example to All

Costa Rica ranks 35th in GDP per capita – but placed eighth of 106 countries for child well-being and 12th on the Mothers' Index. Compared with other countries that have a similar GDP per capita, Costa Rica's performance is even more impressive (see table below).

The infant mortality rate for Costa Rica is 12 deaths per 1,000 live births, and virtually everyone has access to safe water. Primary school enrollment is very high. Almost 90 percent of students who enroll reach grade 5, and nearly half the children of secondary school age are in school. Notably, these education indicators show almost identical rates for boys and girls, compared to the significant gender gap in so many other developing countries. And Costa Rica has achieved this level of well-being for its mothers and children with a GDP per capita of $6,650.

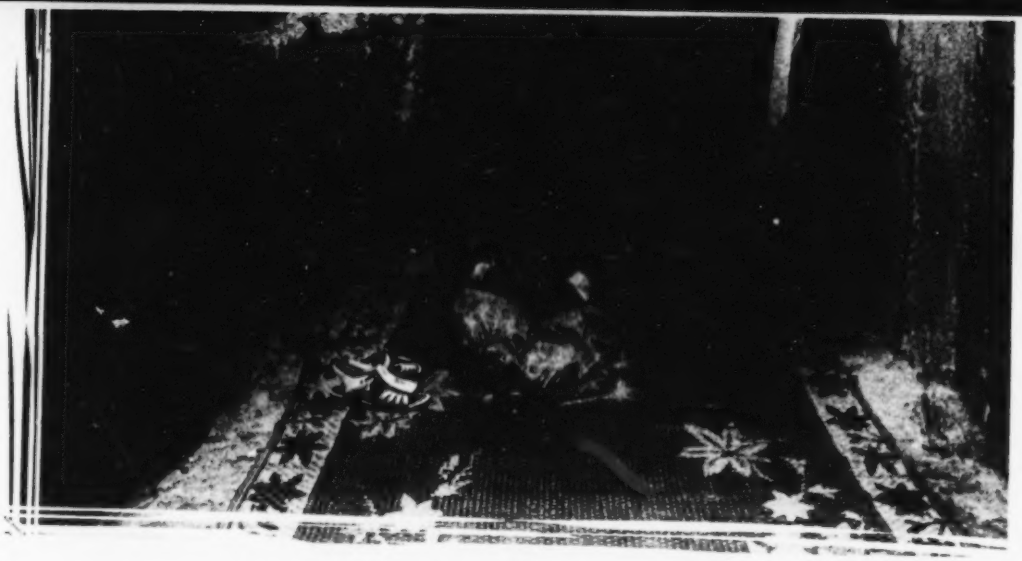
Why have Costa Rican mothers and children fared so favorably compared to those in many developing countries? Part of the answer lies in the government's ongoing support of health and education programs. Since the 1970s, the government has invested 7 to 10 percent of GDP in the health sector – and made low-cost contraceptives available through public health services. Sixty-five percent of women now choose to use modern contraception and 75 percent use some form of family planning.[19]

A UNICEF report attributes Costa Rica's impressive performance to high government investment in all levels of education, from primary school to universities. The presence of a stable democratic government has facilitated these efforts. Within little more than a generation, Costa Rica's infant mortality rate has fallen by 81 percent, and the average family size has dropped from seven in 1950 to three today.[20]

How Costa Rica compares in performance to other countries with a similar GDP

Country	GDP Per Capita Ranking	GDP Per Capita	Women's Index Ranking	Children's Index Ranking	Mothers' Index Ranking
Libya	33	$6,697	70	16	60
Thailand	34	$6,690	41	51	42
Costa Rica	**35**	**$6,650**	**12**	**8**	**12**
Brazil	36	$6,480	26	35	28
Turkey	37	$6,350	59	65	62

a call to action



A mother sitting with her son in Amman, Jordan

State of the World's Mothers 2000 provides a comparative assessment of where it is most and least challenging to be a mother at the start of a new century. It also helps to identify the programs and investments that make a substantial difference in women's and children's well-being. But information alone is insufficient. A clear set of achievable goals is essential. The following are steps that individual countries, developing and industrialized, can and must take to improve the lives of the world's mothers and their children.

1. Ensure access to quality education for *both* women and girls. Numerous studies have established that education is a critical means of improving the quality of life for mothers and children. In a world where girls account for two-thirds of the 130 million primary school-age children who are not in school, focus on this area is urgent. In too many places, girls are denied equal access to education. And where progress has been made in enrolling girls, dropout rates are often increasing.

Retention and quality must be improved. Teachers need to be sensitive to girls' needs and female teachers more visible as role models. Policies and programs should support the recognition that girls need to study and do homework *outside* of school to have an equal chance of succeeding *in* school.

Nor should mothers who never had a chance to go to school be overlooked. For literacy to be effective, it must focus on a woman's specific needs and help her improve the welfare of her family. Despite the clear benefits of female education, only 71 percent of women worldwide are literate – compared to 84 percent of men. Governments and the donor community need to ensure that literacy training is given high priority in their programs and development assistance.

2. Ensure that *all* women have access to high-quality, voluntary family planning services. These services are best provided in the context of broader health services for women and children. As this report shows, especially for developing countries, use of

A Filipino mother comforts her son.

contraception can dramatically improve the health and well-being of women and children.

Although family planning services are more widely available than ever, more than 150 million married women in the developing world who would like to use these services, do not have access to them. The need is highest in sub-Saharan Africa, where in some countries one married woman in three does not have easy access to contraception.

Family planning services also need to be made available to groups that are outside the reach of traditional health programs, including the urban poor, adolescents, and men.

3. Improve current research and conduct new studies that focus specifically on mothers. While global research on women does exist, remarkably little attention has focused on the circumstances and needs of mothers. Given that nearly two billion of the world's six billion people are mothers, this area of further inquiry is pressing. In particular, government and private research should seek more comprehensive information on women's control of family income, domestic violence, access to quality childcare, and other critically relevant areas.

Tell Congress You Care

Most Americans believe the United States spends far more than it does on foreign aid. Actually *less than one percent* of the federal budget is devoted to foreign assistance — and less than half of that goes to humanitarian aid programs that help millions of the world's poorest people.

U.S. aid works to protect children and improve lives. U.S. assistance is largely credited with fully immunizing 80 percent of all children in developing countries, eradicating smallpox worldwide, and virtually eliminating polio in the Western Hemisphere. Since 1960, development assistance has helped reduce infant mortality rates in developing countries by 50 percent, increase life expectancy from 46 years to 62 years, and increase primary school enrollment from 48 percent to 78 percent.[21]

U.S. aid works to advance women's rights. Programs are increasing women's and girls' access to education, health care, and economic opportunities. Small microenterprise loans to poor women constitute one of the greatest success stories in the developing world.

U.S. aid works to improve reproductive health. More than 60 million couples in the developing world use family planning as a direct result of U.S. assistance to voluntary family planning programs. Over the past 35 years, the average number of children per family in the developing world has been reduced by one-third — from six children to four. These families are better able to feed, clothe, and educate their children.[22]

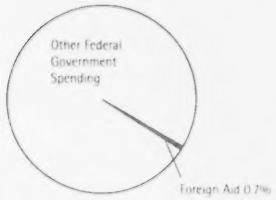
Despite these and other breakthroughs, and at a time when the well-being of the developing world is increasingly linked to U.S. interests, the U.S. Congress has cut these programs by 20 percent or more over the past five years, shrinking U.S. foreign aid to a 50-year low. International family planning programs have been cut by more than one-third. The United States now spends less of its national wealth on helping the poor overseas than any industrialized nation.[23]

4. Close the gap in mothers' and children's well-being among marginalized populations in industrialized countries. Despite the obvious wealth of industrialized countries, certain women, mothers, and children are grossly underserved, especially minority and immigrant populations and the rural poor. Given the knowledge about the most effective ways to improve the lives of mothers and children, special consideration should be given to reach those women, mothers, and children with the greatest need.

A mother and her daughter in Nicaragua

Less Than 1 Percent

U. S. Federal Budget

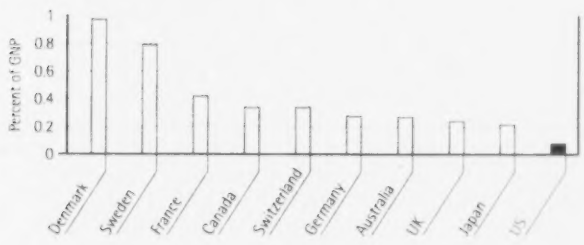


While most Americans think we spend much more, less than 1 percent of the total U.S. federal budget goes to foreign aid. Less than half of that goes to economic development and humanitarian assistance.

Source: Office of Management and Budget and USAID, 1999.

Official Development Assistance as a Percentage of GNP

Although the United States is the largest and richest donor country, it ranks last among all donors with .09 percent of official development assistance as a percent of gross national product (GNP).



Source: Organization for Economic Cooperation and Development, 1997.

A group of children in Mali

Conclusion

We are bombarded constantly by news reports of natural disasters, terrorism, and economic crises. But we rarely hear about the harsh daily realities of so many of the nearly two billion mothers and their children throughout the world.

With the largest generation of young people fast approaching adulthood and their childbearing years, this report comes at a critical time. The problems they face are deep-rooted and persistent. But we know that practical solutions are within our reach. And to a large degree, we know what works. *State of the World's Mothers 2000* makes clear that quality female education and access to high quality, voluntary family planning and related health services are two solutions that can make an enormous difference in the lives of mothers and their children.

Now is the time for action. We must ensure that mothers everywhere have the opportunity to break the cycle of poverty and improve the quality of life for themselves, for *their* children, and for all generations to come.

Meeting the Needs of the Largest Generation in History

More than one billion people are between the ages of 15-24 – the largest generation of youth in history. More than 85 percent live in the developing world. In all, half the world's population, or about three billion people, is under the age of 25.

The world's ability to meet the range of needs of this growing population of young people, such as education, jobs, and a healthy environment, will determine the well-being and quality of life for generations to come.

Despite progress, much work remains to be done. In the area of education for instance, 130 million children are not currently enrolled in primary school. While much of the developing world has seen spectacular gains in economic progress and living conditions, the pattern of growth has been uneven. Roughly one-fifth of the world's population live in deepening despair, struggling against hunger, inadequate housing, disease, and unemployment.

Similarly, our ability to meet the reproductive health needs of young people could help curb the global challenge of teen pregnancy. More than 40 percent of all teenage girls in the developing world will give birth before the age of 20.

Providing adolescents with greater access to reproductive health information and services would help encourage more responsible sexual behavior, including abstinence. In turn, the number of teenage pregnancies and resulting health complications would be reduced, and young adults – particularly women – would have a greater opportunity to stay in school and succeed in life.

Appendix 1:
The Complete Mothers' Index

Country	Women's Index						Children's Index				GDP	Mothers' Index Rank
	Health Status				Educational Status	Political Status	Children's Status					
	Lifetime risk of maternal mortality (1 in number shown)	Percent of women using modern contraception	Percent of births attended by trained personnel	Percent of pregnant women with anemia	Adult female literacy rate (in percent)	Percent of national government positions held by women	Infant mortality rate per 1,000 live births	Gross primary enrollment ratio (expressed as a percent)	Percent of population with access to safe water	Percent of under-fives suffering from moderate or severe malnutrition	GDP per capita	Rank on Mothers' Index
Algeria	120	49	77	42	49	2	34	107	78	9	4,460	68
Angola	6	NA	15x	29	29	6	170	88	32	6	1,430	97
Argentina	260	NA	97	26	96	3	21	113	65	NA	10,300	30
Australia	4,900	72	100	NA	99	24	5	106	99	NA	20,210	3
Bangladesh	21	41	8	53	26	3	81	69	97	16	1,050	94
Benin	12	3	60	41	26	10	102	72	50	14	1,270	92
Bolivia	26	17	47	51	76	9	69	95	63	4	2,880	65
Botswana	65	32	78x	NA	60	11	39	115	93	11	7,690	59
Brazil	130	71	92	33	83	13	37	112	76	2	6,480	28
Burkina Faso	14	6	42	24	9	10	110	38	78	13	1,010	100
Burundi	9	1	19x	68	23	4	106	70	52	9	630	102
Cameroon	26	4	64	64	52	5	64	88	50	3	1,890	75
Canada	7,700	74	99x	NA	99	19	6	102	99	NA	22,480	2
Central African Republic	21	3	46	67	52	5	113	58	38	7	1,330	88
Chad	9	NA	15	37	35	3	118	55	24	14	970	101
Chile	490	NA	100	13	95	12	11	100	91	1	12,730	16
China	400	83	89	52	73	4	38	120	67	NA	3,130	44
Colombia	300	59	85	24	91	25	25	114	85	1	6,810	14
Costa Rica	420	65	98	NA	95	21	12	107	100	NA	6,650	12
Cote d'Ivoire	14	5	45	NA	30	3	90	69	62	8	1,840	89
Cuba	490	68	99	NA	95	6	7	105	93	3	3,100	19
Cyprus	6,900	NA	100x	23	91	5	8	100	100	NA	14,201	10
Czech Republic	2,900	65	NA	76	99	1	6	103	NA	2	10,510	35
Dominican Republic	230	60	96	NA	82	12	44	103	65	1	4,820	32
Ecuador	160	46	64	17	88	10	30	109	68	2x	4,940	31
Egypt	120	48	58	24	39	2	54	100	91	6	3,050	70
El Salvador	65	48	87	16	70	16	31	88	69	1	2,880	37
Ethiopia	9	2	14x	42	25	11	111	31	25	8	510	102
England	4,200	77	100	NA	99	16	4	100	98	NA	20,150	8
France	3,100	70	99	NA	99	9	5	106	100	NA	22,030	9
Gambia	13	NA	44	80	25	7	66	73	48	NA	1,470	98
Ghana	18	10	41	NA	64	11	68	76	65	11	1,640	78
Guatemala	75	26	35	39	57	16	43	84	77	3	4,100	64
Guinea	7	1	31	74	22	5	126	48	46	12	1,880	104
Haiti	11	13	21	28	42	14	92	56	37	8	1,270	83
Honduras	75	41	61	14	73	17	36	111	67	2	2,220	33
Hungary	1,500	59	99x	NA	99	8	10	97	NA	2x	7,200	18
India	37	37	16	88	38	6	71	100	81	16	1,670	85
Indonesia	41	52	14	64	78	2	45	114	62	13	3,490	66
Iran	150	45	86	NA	58	0	32	99	90	7	5,811	61
Iraq	46	11	54	18	45	0	94	90	78	10	3,787	77
Jamaica	280	58	91	40	89	13	10	109	66	4	3,440	21
Japan	2,900	53	100x	NA	99	6	4	102	93	NA	24,070	15
Jordan	95	27	97	NA	78	2	20	94	98	2	3,410	43
Kazakhstan	370	46	100	11	99	1	37	96	93	3	3,560	24
Kenya	20	28	45	35	70	5	57	85	53	6	1,190	69
Korea, Republic of	280	69	98x	NA	97	2	6	101x	82	NA	13,590	21
Kuwait	820	32	99x	40	75	6	12	73	NA	3x	25,314	50
Lebanon	65	16	98	NA	80	0	30	109	94	3	5,940	40
Lesotho	26	19	50	7	62	14	95	99	62	5	1,860	63
Libya	55	26	76	NA	63	0	22	110	97	3	6,697	60
Madagascar	27	5	47	NA	46	0	96	72	34	7	930	90
Malawi	20	14	55	55	42	6	135	135	37	7	710	82

For definitions of indicators, see pp. 5-6.

x = data may refer to a different year than the year noted or may vary from the standard.

Country	Women's Index						Children's Index				GDP	Mothers' Index Rank
	Health Status				Educational Status	Political Status	Children's Status					
	Lifetime risk of maternal mortality (1 in number stated)	Percent of women using modern contraception	Percent of births attended by trained personnel	Percent of pregnant women with anemia	Adult female literacy rate (in percent)	Percent of national government positions held by women	Infant mortality rate per 1,000 live births	Gross primary enrollment ratio (expressed as a percent)	Percent of population with access to safe water	Percent of under-fives suffering from moderate or severe nutritional wasting	GDP per capita	Rank on Mothers' Index
Malaysia	270	31	99	56	78	6	10	91	78	NA	8,140	51
Mali	10	5	25	58	23	7	145	34	66	23	740	105
Mauritania	16	1	40	NA	26	5	120	78	74	7	1,730	94
Mauritius	300	49	97	29	79	7	20	107	98	15	9,310	41
Mexico	220	58	91	14	87	7	29	115	95	6x	8,370	26
Moldova	580	50	NA	50	100	4	25	94	55	NA	1,500	47
Mongolia	310	25	100	45	77	5	105	88	80	1	1,310	58
Morocco	33	42	43	45	31	1	58	83	65	2	3,310	80
Mozambique	9	6	44	58	23	13	130	60	63	5	740	93
Myanmar	33	14	56	58	78	0	81	100	60	8	1,199	71
Namibia	42	26	68	16	74	7	58	133	57	9	5,010	54
Nepal	10	26	9	65	14	0	75	110	63	11	1,090	99
Netherlands	4,300	76	100x	NA	99	20	5	107	99	NA	21,110	6
New Zealand	1,600	72	99x	NA	99	17	7	104	90	NA	17,410	11
Nicaragua	100	45	61	36	67	11	42	110	61	2	1,997	54
Niger	9	2	15	41	7	9	191	29	48	15	850	106
Nigeria	13	3	31	55	47	4	112	89	50	9	920	84
Norway	7,300	69	100x	NA	99	44	4	99	100	NA	24,450	1
Oman	60	19	93	54	46	4	15	80	82	13	9,960	74
Pakistan	38	13	18	37	24	2	95	74	74	NA	1,560	96
Panama	510	54	86	NA	90	11	18	106	84	1	7,168	21
Papua New Guinea	17	20	53	13	63	2	79	80	28	6x	2,654	73
Paraguay	120	41	61	29	91	3	27	109	60	0	3,980	39
Peru	85	41	56	53	83	10	44	123	67	1	4,680	44
Philippines	75	25	64	48	94	24	32	116	84	6	3,520	29
Portugal	3,500	32	90x	NA	87	18	7	128	82	NA	14,270	16
Romania	340	14	100x	31	97	3	22	100	NA	3	4,310	34
Russia	620	NA	99	30	99	2	20	108	NA	4	4,370	27
Senegal	11	8	47	26	23	2	72	69	63	7	1,730	86
Singapore	4,900	73	100x	NA	86	5	4	104	100	NA	28,460	13
South Africa	85	49	82	37	82	7	49	117	99	3	7,380	36
Sri Lanka	230	43	94	39	87	9	17	113	57	14	2,490	47
Sudan	21	6	69	36	35	1	73	54	50	13	1,560	91
Switzerland	8,700	65	99x	NA	99	7	5	107	100	NA	25,240	4
Syria	75	28	67	NA	56	4	27	101	86	9	3,250	67
Tajikistan	120	NA	79	50	99	4	56	89	60	NA	1,126	52
Tanzania	18	13	38	NA	57	9	92	67	38	6	580	81
Thailand	180	72	71x	57	92	4	31	87	89	6	6,690	42
Togo	20	3	54x	48	37	3	78	133	55	NA	1,490	79
Trinidad and Tobago	360	45	98x	53	97	14	15	96	96	4x	6,840	24
Tunisia	140	51	81	NA	55	5	27	116	98	4	5,300	52
Turkey	130	35	76	NA	72	5	40	105	49	NA	6,350	62
Uganda	10	8	38	30	50	10	86	73	46	5	1,160	76
United Arab Emirates	730	24	96x	46	80	0	9	95	98	15	19,115	56
United Kingdom	5,100	78	100x	NA	99	8	6	115	100	NA	20,730	7
Uruguay	410	NA	96x	20	98	3	18	111	89	1	9,200	20
USA	3,500	67	99x	NA	99	30	7	102	NA	1	29,010	4
Uzbekistan	370	52	98	NA	99	3	46	77	62	12	2,529	47
Venezuela	200	37	69x	29	90	6	21	94	79	3	8,860	38
Vietnam	130	44	85	52	91	4	32	113	43	14	1,630	56
Yemen	8	10	43	NA	39	0	76	79	61	NA	810	86
Zambia	14	14	47	34	71	9	112	89	27	4	960	72
Zimbabwe	28	42	69	NA	80	11	53	116	79	6	2,350	44

Save the Children

Appendix 2: Methodology and Research Notes

1. A review of current literature and consultation with members of the Save the Children program staff identified women's health status, educational status, political status, and children's well-being as key factors related to the well-being of mothers.

2. Indicators were selected to represent these factors, and published data sources for each indicator were identified. In some cases, the factors were difficult to capture because few countries reported related statistics. To adjust for these variations in data availability when calculating the final index, the indicators for maternal health and children's well-being were grouped into sub-indices *(see step 6)*. This procedure allowed researchers to draw on the wealth of useful information on those topics without giving too little weight to the factors for which less abundant data were available.

3. Data were gathered for seven indicators of women's status and four indicators of children's status.

The indicators that represent the Women's Index include:

Lifetime Risk of Maternal Death
Calculations are based on maternal mortality and fertility rate in a country. Some country estimates are derived using a WHO/UNICEF methodology. Source: WHO, "Maternal Health Around the World" (wall chart), 1997, Geneva.

Percent of Women Using Modern Contraception
Data are derived from sample survey reports and estimate the proportion of married women (including women in consensual unions) currently using modern methods of contraception (including male and female sterilization, IUD, the pill, injectables, hormonal implants, condoms, and female barrier methods.) Source: "Contraceptive Trends and Levels 1998" (wall chart), as published in *6 Billion, A Time for Choices: The State of World Population 1999*, UNFPA, New York.

Percent of Births Attended by Trained Personnel
Percentage of births attended by trained personnel is defined as those births attended by physicians, nurses, midwives, or primary health care workers trained in midwifery skills. Data are from 1990-1997. Source: UNICEF *State of the World's Children*, 1999, New York. Available on-line at www.unicef.org/sowc99/.

Percent of Pregant Women with Anemia
Prevalence of anemia, or iron deficiency, is defined as hemoglobin levels less than 11 grams per deciliter among pregnant women. Data are from 1985-1995. Source: World Bank. Available on-line at www.worldbank.org/data/wdi/pdfs/tab2_16.pdf.

Female (Adult) Literacy Rate
Female literacy rate is the percentage of women over 15 years of age who can read and write. Data are from 1995. Source: UNDP *Human Development Report*, 1998, New York. Available on-line at www.undp.org/hdro/98.htm.

The indicator that represents Women's Political Status is:

Percent of National Government Positions Held by Women
This is the percentage of national government positions occupied by women. Source: UNDP *Human Development Report*, 1998. Available on-line at www.undp.org/hdro/98.htm.

The indicators that represent the Children's Index include:

Infant Mortality Rate
Infant mortality rate is the probability of dying between birth and one year of age, expressed per 1,000 live births. Data are from 1997 and gathered by UNICEF, UNPD, and UNSD. Source: UNICEF *State of the World's Children*, 1999, New York. Available on-line at www.unicef.org/sowc99/

Gross Primary Enrollment Ratio
The gross primary enrollment ratio is the total number of children enrolled in primary school, expressed as a percentage of the total number of children of primary school age. Data are from 1990-1996. Source: UNICEF *State of the World's Children*, 1999, New York. Available on-line at www.unicef.org/sowc99/.

Percent of Population with Access to Safe Water
This indicator reports the percent of the population with access to adequate safe water within a convenient distance from the user's dwelling, as defined by country-level standards.

Source: UNDP *Human Development Report*, 1998, New York.
Available on-line at www.undp.org/hdro/98.htm.

Percent of Under-fives Suffering from Moderate or Severe Nutritional Wasting
Moderate or severe wasting is defined as more than two standard deviations below median weight for height of the reference population. Data are gathered by WHO and UNICEF.
Source: UNICEF *State of the World's Children*, 1999, New York.
Available on-line at www.unicef.org/sowc99/.

4. Gross Domestic Product per capita, Purchasing Power Parity (PPP), was also included in the data set for use in the analysis of mothers' and children's well-being compared to national wealth. The Purchasing Power Parity compares the cost of purchasing a set of goods and services in a particular country, using local currency, with the cost of purchasing identical goods and services in the U.S. market, using U.S. currency. In general, using this technique reduces the income gap between industrialized and developing countries. The data are from 1997.
Source: UNDP *Human Development Report*, 1999, New York.
Available on-line at www.undp.org/hdro/report.html.

5. Standard scores, or Z scores, were created for each of the indicators using the following formula:

$$Z = \frac{X - \overline{X}}{S}$$

Z = The standard, or Z score
X = The score to be converted
$\overline{X}$ = The mean of the distribution
S = The standard deviation of the distribution

6. The standard scores of indicators of ill-being were then multiplied by (-1) so that a higher score indicated increased well-being on all indicators.

7. The standard scores of the four indicators related to women's health were averaged to create an index of women's health. An index of child well-being was created the same way. At this stage, cases (countries) missing more than one indicator for either sub-index were eliminated from the sample. Cases missing any one of the other indicators (i.e., educational status, political status) were also eliminated.

8. The Mothers' Index was calculated as a weighted average of women's health status (30 percent), women's educational status (30 percent), children's well-being (30 percent) and women's political status (10 percent). The scores on the Mothers' Index were ranked. For additional analysis, countries were also ranked by GDP per capita (PPP) and the discrepancy between the two rankings was calculated in order to identify "overperformers," or positive deviation from the trend between mothers' well-being and GDP.

   Note: Data exclusive to mothers are not available for many important indicators (e.g., literacy rate, government positions held). In these instances, data on *women's* status have been used to approximate maternal status, since all mothers are women. In areas such as health, where a broader array of indicators are available, the index emphasizes indicators that address uniquely *maternal* issues.

9. In order to conduct a multivariate regression, the Mothers' Index was split into a Women's Index and a Children's Index. The weights within the Women's Index were health status (43 percent), educational status (43 percent), and political status (14 percent). The various factors of the Women's Index were used as independent variables in a multiple regression with children's well-being (as measured by the Children's Index) as the dependent variable. Additional stepwise multiple regression analysis was conducted using the original indicators as independent variables and children's well-being as the dependent variable.

10. Along with the multiple regression, a variety of simple bivariate correlations were calculated among the maternal well-being factors and the original indicators.

11. Data analysis was conducted using SPSS and Microsoft Excel software.

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Appendix 3: Notes and References

1. Countries designated as industrialized and developing in this report generally follow UN classifications. Countries in Central and Eastern Europe (CEE) and the Commonwealth of Independent States (CIS), which are listed as a distinct category in the 1999 UNDP Human Development Report, are included in the industrialized group in this study. Generally, developing countries are characterized by one or more of the following attributes: low per capita GDP, high proportion of national wealth derived from agriculture or mining, relatively high percentage of the population living below the poverty line. Industrialized countries are characterized by a relatively high per capita GDP, with a substantial proportion derived from manufacturing, technology, and knowledge-based industries.

2. "Modern methods" include male and female sterilization, IUD, the pill, injectables, hormonal implants, condoms, and female barrier methods.

3. "U.S. NGOS in Support of ICPD+5," Factsheet, March 1999, Washington, D.C.

4. U.S. Agency for International Development, AIMS (Impact Assessment Project for Microfinance), Washington, D.C.

5. Statistics Canada, February 28, 2000. www.statcan.ca

6. Australian Bureau of Statistics, February 28, 2000. www.abs.gov.au

7. The relationship between women's and children's well-being cannot be shown as clearly in the industrialized countries due to the small number of countries reporting data on the indicators used.

8. UNICEF *State of the World's Children*, 1998, New York.

9. There are notable exceptions to this pattern, especially in the Middle East/North Africa. Oman, for example, has an infant mortality rate of 15 per 1,000 births, one of the best among developing countries, even though its female literacy rate is only 46 percent. On the other hand, Bolivia has a female literacy rate of 76 percent, but a high infant mortality rate of 69 per 1,000 births.

10. Lawrence H. Summers, "Investing in All the People: Educating Women in Developing Countries." Remarks prepared for a development economics seminar at the 1992 World Bank annual meetings.

11. Population Action International, "Educating Girls: Gender Gaps and Gains," 1998, Washington, D.C.

12. The Alan Guttmacher Institute, "Sharing Responsibility: Women, Society & Abortion Worldwide," New York.

13. Population Resource Center, "The Replacement of Abortion by Contraception in Three Central Asian Republics," Washington, D.C.

14. Population Reference Bureau, Share, B. "Family Planning Saves Lives," 1997, Washington, D.C.

15. The GDP per capita has been calculated using Purchasing Power Parities (PPP) as conversion factors. The PPP compares the cost of purchasing a set of goods and services in a particular country, using local currency, with the cost of purchasing identical goods and service in the United States, using U.S. currency. In general, using this technique reduces the income gap between industrialized and developing countries.

16. Children's Defense Fund, "Children in the States" profiles, Washington, D.C.

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20. UNICEF (Working Paper), S. Nehrotra, "Education for All: Policy Lessons from High-Achieving Countries, 1998, New York.

21. InterAction "Development Works" press kit, 1995, Washington, D.C.

22. Ibid.

23. Ibid.

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Right
A mother and her one-year-old son in Jordan

Back Cover
A seven-year-old girl from the Dominican Republic

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